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Accessibility of Inclusive Sports Facilities for Training and Competition in Indonesia and Malaysia

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Abstract: Although the right to participate in sports is recognized in international conventions, accessibility to sports facilities has been cited as barriers to participation. Managers of sports facilities must know the standards that refer to the rules and accessibility to meet the needs of persons with disabilities to participate in sports and to attend sporting events. Therefore, this study aimed to evaluate the accessibility of sports facilities for training and competition in Indonesia and Malaysia. This study used a qualitative method through focus group discussions. Fifteen focus group discussions were conducted with 90 athletes from eight sports (boccia, goalball, basketball, badminton, ping-pong, swimming, powerlifting and blind football) who trained and competed in inclusive sports facilities. There were five major themes that we identified: access to training facilities, access inside training facilities, access during matches and athletes' expectations of training and competition facilities.

Keywords: accessibility; inclusive sport; disability; sport management; sport facility

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1. Introduction

The right to participate in sport is recognized in international conventions. This includes the United Nations Convention on the Rights of Persons with Disabilities, which was adopted in 2006 [1]. Article 30.5 of the Convention, which deals with participation in cultural life, recreation, leisure and sport, states that persons with disabilities should be given opportunities to participate in both mainstream and disability-specific activities as well as access to related services and venues. This includes ensuring that persons with disabilities have access to sports venues. In accordance with the Malaysian Persons with Disabilities Act 2008, persons with disabilities are defined as those who suffer from long-term physical, mental, intellectual or sensory impairments, preventing their full and effective participation in society when faced with challenges. There are seven categories of disabilities, namely: hearing impairment, visual impairment, speech impairment, physical impairment, learning disability, intellectual disability and multiple disabilities.

Universal Design is the process of designing and building an environment in such a way that it can be accessed, grasped and exploited to the greatest extent possible by all people, regardless of their age, aptitude or disability. It is also known as universal accessibility [2]. Access to sports facilities for training and competition can be a key factor in meeting consumers' current demand [3], and it is crucial for evaluating an organization's capacity to meet current client demand while planning for future growth. This access

is frequently associated with a diverse range of users, including athletes, coaches and members of the community, including persons with disabilities. Additionally, the emphasis placed on facility development by sports committees and local governments is strongly associated with increased general population participation in sports. However, there have been different rates of increases in participation for different groups, with persons with disabilities experiencing lower levels of participation compared to the general population [4]. Facilities such as sports halls and fields, fitness centres, community parks and playgrounds used for sports are often not accessible (i.e., uneven terrain, grass or gravel surfaces) [5], thus limiting the participation opportunities of persons with disabilities. In addition to the built environment, program barriers and attitudes towards physical activity exacerbate low participation rates [5–7]. This was also identified in a study by Pedersen et al. (2021), which listed common barriers for physical activity and sports as time restrictions, fatigue and lack of energy, financial restrictions, health-related restrictions, low motivation and shortage of facilities [8].

Inaccessible sporting facilities also have an impact on spectator attendance. Persons with disabilities may not be able to attend sports events [4]. Examples of obstacles at facilities include parking, entranceways, seats, sightlines and facility features such as walkways, elevators and aisles. Unfortunately, sports and leisure facilities for competitive games and sports are frequently inaccessible [9]. This lack of accessibility may prohibit a large number of people with disabilities from accessing sporting facilities [5,10].

A study by Sá et al. (2012) reported that the reason persons with disabilities in Portugal did not participate in physical activity and sports was primarily because of a lack of suitable sports facilities [11]. They also experienced various other issues related to their financial situation. In the United States, depending on the region, persons with disabilities continue to experience various barriers to accessing sports facilities, and according to a survey of 50 sports facilities for people with disabilities in Oregon, major barriers included the entrance, customer service and shower facilities [12,13].

Most research related to the accessibility of facilities have been conducted in high-income countries. The situation could be different in low- and middle-income countries where, according to the World Health Organization, is where 80% of persons with disabilities live [14]. This study aims to investigate the accessibility of sports facilities in two low- and middle-income countries, namely Indonesia and Malaysia. These two countries were chosen because they have been active in supporting disability sports, such as by hosting regional competitions including the ASEAN Para Games (a biennial multi-sport multi-disability competition for athletes from the South East Asian region) and Asian Para Games (a multi-sport multi-disability competition for athletes from Asia which is held every four years).

1.1. Situation in Indonesia

Nine percent of Indonesia's population has a disability (23.3 million) [15]. Other epidemiological results indicate that 19.5% of the Indonesian population with disabilities has difficulties with the capacity to carry out everyday activities, and 2.2% (approximately 5.7 million) of them have severe difficulties, including an inability to perform activities of daily living such as bathing and toileting. Indonesia is a country that has various risks for disability. These include prolonged armed conflicts in Aceh and Papua, conflicts in the Maluku islands and various regions throughout Indonesia due to the struggle for land, work or certain customary violations and natural disasters that come repeatedly in various regions throughout the year. There is still incidence of polio and leprosy, vitamin A deficiency, high incidence of stroke and poor patient safety in medical practices. Polio, for which there is a vaccine, still has a prevalence of around 4/100,000 of the population. The prevalence of leprosy was 0.76/10,000 of the population in 2008. Hypertension, which can lead to stroke, affects 31.7% of the population aged 18 years old and over [16]. The prevalence of disability is also exacerbated by the low level of traffic safety and work safety [17].

There has been government support for persons with disabilities, including disability sports. The government provides facilities that accommodate the needs of persons with disabilities. There is also an Inclusive Sports Training Facility, which is a training and development center for athletes with disabilities.

Indonesia has been involved in international sports competitions for persons with disabilities since the 1970s. The country first took part in the Paralympic Games in 1976 and has taken part in all subsequent editions of the Games except in 1992. Indonesia has won 27 Paralympic medals in total. Indonesia has also hosted international competitions, including the ASEAN Para Games (in 2011 and 2022) and the Asian Para Games (in 2018). Despite the support for disability sports, there are still issues with the facilities.

Volunteers at the 2018 Asian Para Games in the capital Jakarta complained that there were still inadequate accessible facilities at sports events. For example, the steep incline of the ramp into buildings makes it difficult for wheelchair users to enter [18].

1.2. Situation in Malaysia

According to the latest statistics by the Department of Social Welfare, Malaysia, there were 581,265 persons with disabilities registered with the department in 2020. This is nearly 2% of the 32.7 million population of the country. However, this is not the exact percentage as registration is not mandatory.

There is government support for persons with disabilities, including legislation and facilities. In terms of disability sports, the Malaysian government provides funding, sports science support and facilities. The construction of the Malaysia Paralympic Sports Excellence Center in 2014 was a step toward achieving the country's goal of becoming a Paralympic powerhouse.

Similar to Indonesia, Malaysia has also been taking part in international disability sports competitions since the 1970s. The country first took part in the Paralympic Games in 1972. Malaysia next took part in 1988 and has been taking part in every Paralympics since then. Positive trends in terms of government support, media coverage and public perception can be seen, especially after Malaysian athletes first won gold medals at the 2016 Paralympic Games. This increased interest in disability sports could serve as an impetus to champion the rights of persons with disabilities [19].

1.3. The Legislation and Regulatory Systems

Accessible design, specifically for the built environment and sports facilities, is the subject of this section, which focuses on the formation of policies, legislation, standards and guidelines, as well as on research and regulation implementation. Both countries have legislation related to this.

Disability in Indonesia is defined in National Law number 8, 2016, based on the framework of the International Classification of Functioning, Disability and Health (ICF). [20]. Article 18 provides the main legal basis for disabled people's right to accessibility. Such provisions require the Government to create a more appropriate condition and environment for persons with disabilities to be able to fully participate in society. Meanwhile, Law No. 16/1985 on Flats, Law No. 28/2002 on Buildings and the Minister of Public Works Regulation No.30/2006 on the Technical Requirements for Building Accessibility have included provisions requiring all developers or contractors for public infrastructure and facilities to provide accessibility for persons with physical limitations [21]. The availability of accessible buildings and public facilities has also become one of the criteria for cities to be granted awards such as the Inclusive City Award and Environment-Friendly City Award. These awards have become a strategy to encourage competition among local leaders to improve their public services, including for persons with disabilities.

In Malaysia, Section 32 of the Persons with Disabilities Act 2008 emphasizes access to recreation, leisure and sport [22]. "Accessibility" refers to the "convenience provided to Persons with Disabilities in order to realize equal opportunities". The country's building by-laws were revised as part of the Act, making it mandatory for buildings to offer access

and facilities for those with disabilities. Moreover, the available infrastructure support is one of the factors that keep athletes optimistic in achieving maximum performance, and one of them is the support of easy accessibility to sports facilities. With the passage of the Persons with Disabilities Act 2008 and the Uniform Building By-Law 34A in Malaysia, a similar Act was enacted to assist persons with disabilities in accessing and using public buildings [23].

With the emphasis on disability sport excellence in both Indonesia and Malaysia, it is valuable to examine the accessibility of sports facilities, as facilities are vital to achieving sporting excellence. This study aims to evaluate the accessibility of sports facilities for training and competition based on para-athletes' experiences.

2. Materials and Methods

2.1. Participants

This study collected data over a six-month period utilizing a qualitative approach. Ethics approval was obtained from the Universitas Padjadjaran's ethics committee (543/UN6.KEP/EC/2021) and the University Malaya Research Ethics Committee (UM.TNC 2/UMREC-668). Participants in the research were Paralympic athletes who were nominated by the Paralympic athlete association. We included athletes with vision impairment, hearing impairment and speech and physical impairment who could communicate effectively and utilized sports facilities for training and competition. Participation in the study was voluntary and all the participants provided written informed consent. Participants were 35 Paralympic athletes from Indonesia and 55 Paralympic athletes from Malaysia who trained and competed in inclusive sports facilities. These athletes participated in eight sports, namely boccia, goalball, basketball, badminton, ping-pong, swimming, powerlifting and blind football. They were aged between 18 and 35 years, with more male athletes (75.6%) compared with female athletes (24.4%).

2.2. Procedure

FGDs were conducted between May and July 2021. Athletes from each of the selected sports were invited to participate in focus group discussions (FGD). The FGDs were conducted by a trained facilitator and were assisted by a note taker. The FGDs for the Indonesian athletes were carried out at the hotel where the athletes stayed during their training camp, while the FGDs for the Malaysian athletes were conducted at the Malaysian Paralympic Sports Excellent Center. Coaches were not present in the FGDs with athletes to ensure that the athletes could talk freely. The FGDs were conducted in the afternoon after the athletes' training session.

The FGDs followed the question guide that had been prepared. Examples of questions are as follows:

- How can you get access to the training area?
- What are the training areas' facilities?
- How do you get to the location of the match?
- What are your expectations for the future in terms of training and competition accessibility?

The FGDs were conducted for each sport and each FGD lasted between 45–70 min. Audio recordings were made after getting permission from the participants. The validity of the data was established throughout the data-gathering procedure by triangulating the data sources from the informants. Each athlete had the opportunity to correct and check the outcomes of the replies throughout the discussion session. The FGDs were transcribed verbatim and were coded with the assistance of independent qualitative researchers. Figure 1 shows the flow diagram for the methodology and data collection.

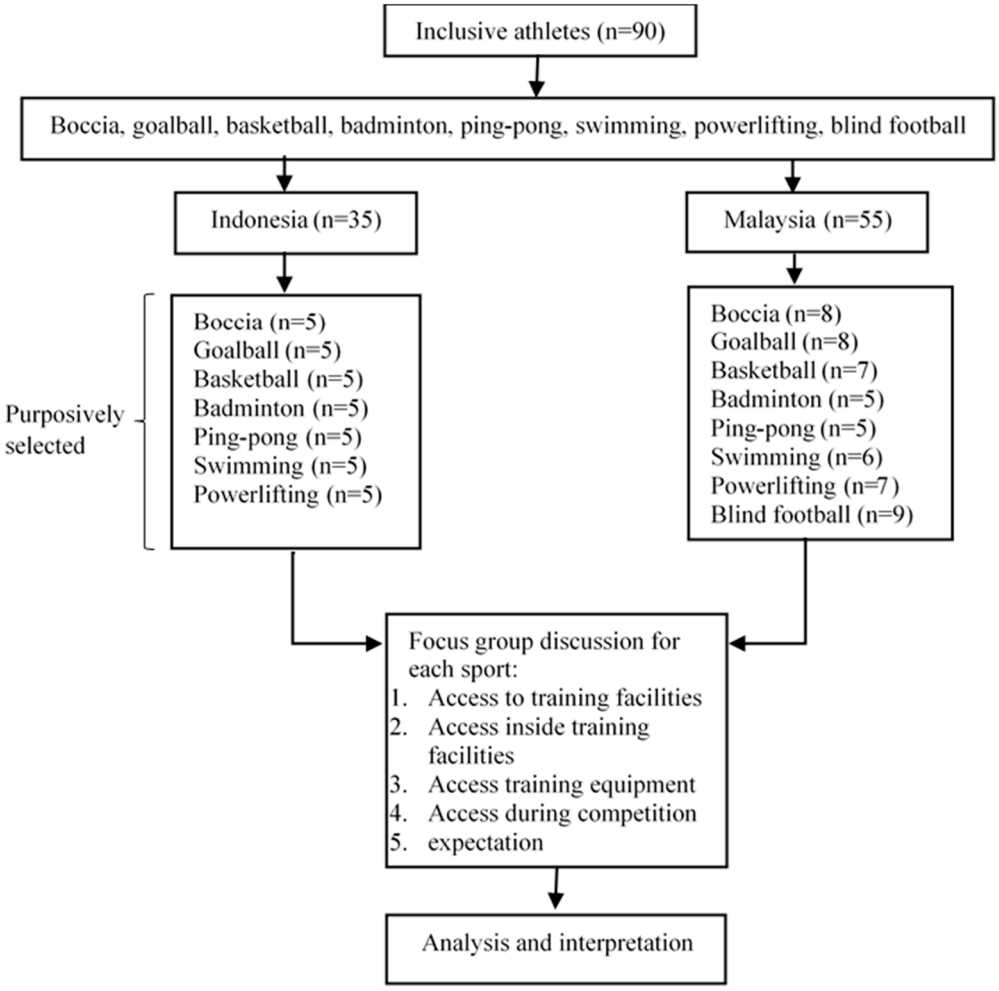

Figure 1. Methodology and data collection.

3. Results

Based on the data, five major themes were identified: access to training facilities, access inside training facilities, access during matches and athletes' expectations of training and competition facilities. Table 1 summarizes the themes and keywords of the participants' statements.

Table 1. Themes and keywords of participants' statement.

No	Themes	Keywords
1	Access to the training facilities	Public transport accessibility; motorcycle accessibility; not handicapped friendly; rejected by an online taxi driver
2	Access inside the training facilities	Lack of information signs; no disaster mitigation information; lack of braille signs; no voice information
3	Access to training equipment,	A special-purpose training facility; small rooms; noisy; standardized court/field; air conditioner; lighting; no locker available; standardized equipment; equipment availability; adjustable bench
4	Access during competition	Weather surrounding adaptation, field orientation, supporting facilities (transportation, hotel, staff)
5	Athletes' expectation	Training facilities; additional coaches; availability of lockers; rest areas at the training facilities; toilets; training equipment; parking; bus transfer

The specific problems mentioned by the athletes for the themes are presented in Table 2.

Table 2. Descriptive analysis of participants statements.

No	Themes	Problems	Indonesia (*n* = 35) *n* (%)	Malaysia (*n* = 55) *n* (%)
1	Access to the training facilities	Difficult to access public transportation	11 (31.43)	2 (3.64)
		Rejected by taxi driver	3 (8.57)	2 (3.64)
2	Access inside the training facilities	Lack of information signs	11 (31.43)	3 (5.45)
		No disaster mitigation	15 (42.86)	0 (0)
		Lack of braille signs	2 (5.71)	4 (7.27)
		No voice information	0 (0)	2 (3.64)
3	Access to training equipment	A special-purpose training facility	10 (28.57)	3 (5.45)
		Noisy	2 (5.71)	3 (5.45)
		Small room	1 (2.86)	0 (0)
		Unstandardized court/field	6 (17.46)	11 (20
		Equipment availability	10 (28.57)	6 (10.91)
		Unstandardized equipment	9 (25.71)	1 (1.81)
		Air conditioner	0 (0)	4 (7.27)
		Lighting	0 (0)	2 (3.64)
		No locker	10 (28.57)	2 (3.64)
4	Access during competition	Weather surrounding adaptation	6 (17.46)	3 (5.45)
		Field orientation	6 (17.46)	0 (0)
		No supporting facilities	8 (22.86)	0 (0)
5	Athletes' expectation	Training facilities improvement	6 (17.46)	6 (10.91
		Additional coaches	10 (28.57)	1 (1.81)
		Availability of lockers	0 (0)	1 (1.81)
		Restroom at training facilities	0 (0)	2 (3.64)
		Toilets	0 (0)	1 (1.81)
		Training equipment	2 (5.71)	0 (0)
		Parking	10 (28.57)	0 (0)
		Bus transfer	0 ()	1 (1.81)

3.1. Access to the Training Facilities

Ride-hailing apps (such as Grab, Uber) were widely used to support athletes' mobility since it is simple to find the destination point that corresponds to the targeted address. The majority of athletes used ride-hailing apps, while others used private vehicles, such as motorcycles and cars, or public transportation or conventional motorbike taxis to get to training facilities. "Like us, calling Grab service, sometimes Grab service can't be taken because it's a wheelchair . . . That wheelchair battery . . . " (Z and Ac, basketball).

When using ride-hailing apps, athletes in both Indonesia and Malaysia frequently face rejection from drivers because they use a wheelchair. Some athletes said that when they used public transport such as mass rapid transit (MRT) or buses, they did not receive priority seating and had to ask the duty officer for assistance in locating priority seats, which were utilized more frequently by people without disabilities. " . . . but when it comes to transportation, such as the bus or the MRT, it's often like we walk and want to sit down like we're not given a place, even though I already know I'm looking at my way, but he doesn't want to step aside" (Y, swimming).

Athletes who utilize public transportation have trouble finding a taxi (*angkot* in the Indonesian language) and must rely on the assistance of others. They also claimed that public transit in Jakarta and Kuala Lumpur, such as buses, is inaccessible due to their high platform. They frequently have to wait a long time if no one assists them. The athletes can usually obtain the assistance of police officers to help them hail a taxi.

3.2. Access inside the Training Facilities

Athletes complained that pedestrian paths were usually blocked. Indonesian athletes complained about the presence of a tree in the center of a pedestrian path that blocked the route to training facilities. Many pavements have cracks and holes. An athlete claimed that he had fallen into a ditch as a result of a pothole in the road. Road surfaces are also uneven and curving, making it challenging for athletes with visual impairment and those who use wheelchair. "Because there is no ramp at the entrance to the training facilities, wheelchair users must be lifted. The most worrisome aspect of the access is that it encounters a tree, so we follow the path with a guiding block, but the access is incorrect; instead, the direction is to a tree. And there are a lot of them at the Pajajaran (name of training facility)" (H, goalball).

The route to the training facility in Malaysia has similar issues in terms of condition, with many poles that obstruct persons with visual impairment. Furthermore, it is a long walk up and down the hill from the hostel. Access must also go through the highway, so you must be cautious, and it is expected that an accident would occur owing to a large number of passing automobiles. When it rains, the road becomes slippery. "Only for me, something is wrong (slippery), it's OK, but I need to remember to cross this road . . . here because going down the hill is the road, this road, it needs to be a bit slower. There are even situations when automobiles may be seen driving past the main road . . . right? There is a road in front of us; we descend this hill sometimes quickly, sometimes slowly, and sometimes the automobile doesn't even see us; we must be cautious" (Ac, basketball).

Accessible parking is not available at sports facilities in Indonesia. Several athletes stated that they frequently end up in a parking lot that is far away, and they have to be led by the parking attendant to walk from the parking lot to the training facilities or building. "Yes, since I frequently collide with the car . . . (in the parking lot)" (R, goalball).

3.3. Access to Training Equipment

Athletes in powerlifting and goalball in Indonesia and Malaysia claimed there were no specific training facilities for athletes with disabilities. Furthermore, boccia and blind football athletes in Malaysia indicated that they required a particular facility that met the standards for athletes with disabilities, such as field barriers. Athletes often hit the fence during practice, so they need a safe barrier. "The types (fence) are differentiated as well. Teraflex, which is similar to badminton and has a court, is commonly used by international players. Half of us play on a basketball court. It's slippery on the court, but the advantage (basketball court) is acceptable. If the court is like badminton, there is friction, so people play ball right, the ball is soft and small." (A, boccia).

Indonesian athletes stated that the overall training equipment provided was adequate, although some athletes complained that the equipment is uncomfortable and does not meet performance standards. Goalball athletes complained about being given shoes of the wrong type. Powerlifting athletes also stated that the belts provided were not suitable, forcing them to make their own. " . . . it's not appropriate, ma'am, because according to national or international regulations, it's a belt, so the size must be at least how many inches, ma'am . . . I was forced to make my own in that size." (A, powerlifting).

Athletes also complained about the limited amount of space available because they must share facilities with athletes from other sports. The training facilities are considered less spacious for boccia and swimming athletes.

In Indonesia, noise is a problem, especially for athletes with visual impairment and intellectual disability who need a quiet environment and high focus in ping-pong, goalball and boccia. "Obstacles to training may arise as a result of my impairment, such as vision issues, or because I require a peaceful, non-noisy environment . . . " (Y, ping-pong). Colliding with persons or equipment in the training area is an issue faced during exercise. Furthermore, powerlifting facilities, particularly benches, are insufficient. Meanwhile, the conditions of training facilities for athletes with disabilities in Malaysia include poor air quality because they are not properly covered, excessive heat because there is no air condi-

tioning or fan, glaring light beams, broken light bulbs, cracked floors and power outlets that are too high for wheelchair athletes to reach. "There is frequently no air conditioning in training . . . Our court is hot, and the competition venue is quite cool. So, since CP (cerebral palsy) cannot be cold, cold is equivalent to tightness." (A, boccia).

Malaysian swimmers must share facilities such as lockers with visitors and other athletes at their local training facilities, but not at the national camp in Kg. Pandan due to the athletes' specific training facility. Moreover, they used to collide with each other in the pool because the capacity was limited. If they wanted to use a locker, they would have to pay the same fee as regular pool visitors; thus, they preferred to leave it with their coach. Lockers are rarely provided in swimming training facilities, even though certain athletes require them, and they are only available during competitions. Personal goods are usually relegated to their officials or coach. "We can use the locker, but we must also pay for it. Because we are the only ones that perform the training sessions, we don't utilize it to keep anything. If you're with the public, you may need to keep things because you're worried, but if we're alone, because the coach is also present, it's not necessary; just have it nearby. After all, we simply carry swimming equipment; there's nothing else to pack. Bring only what you need for training and leave the rest at the hostel" (F, swimming).

3.4. Access Facilities during Competition

When athletes arrive at the competition site for the first time, they must adjust to the surroundings and environment of the venue. Field orientation is also repeated multiple times so that the athletes do not become confused since they must be more independent during competitions. " . . . usually in preparation for the competition we have been given how many days before that, the first is to adapt to the weather sometimes the weather conditions in our area and the host are different, the second maybe one of them if we prepare for the match we try the equipment while practicing because during the process before the competition it takes several days and especially heavy lifting we are not allowed to take a break from practicing . . . " (I, powerlifting).

When asked if there was a big difference between Indonesia and Malaysia, athletes in Malaysia stated that there was none. They said that public transport in Jakarta, such as buses, have high doors and platforms that are inaccessible. In addition, the training facility rarely includes a ramp, making wheelchair users' access problematic. Volunteers have to support them as they enter the building. The problem that arises is if the athlete wants to go in and out outside of working hours (the evening), there will be no one to help carry them. "He sent personnel, such as the guy in charge of organizing the program . . . Oh, volunteer . . . In Indonesia usually use stairs. There were people (volunteer) who will lift me . . . Aah. But if it's late in the evening and want to go out and look for food and there's no one around, it's challenging. We have to crawl . . . " (Al, badminton).

3.5. Athletes' Expectation

The athletes expressed their expectations, including their expectations for the construction of training facilities such as arenas, fields, warm up areas and specialized facilities for inclusive sports. Furthermore, the training infrastructure's supporting facilities, such as air conditioning to keep it cool, were expected to be improved. Lockers are required to keep athletes' stuff so that they do not have to carry too many things while training. Because the time to warm up for a competition is frequently limited, the toilets and changing rooms at the tournament location should be closer to the field to facilitate athlete mobility. "If possible, go to the bathroom at the competition venue so it's not too far away, since it's quite tough to use a wheelchair from the competition venue to the toilet, ma'am, if you use a stick, it's a bit better to walk faster. The time between the warm-up and the competition is limited" (An, powerlifting).

Athletes' demands for training equipment include instruments that meet established international and national standards. The disparity in the size and shape of the instrument will make it tough for athletes to modify throughout the competition. Athletes expect a

temporary resting area to lie down during training breaks. They are concerned about interfering with the training efforts of other athletes if they relax on the sidelines. Furthermore, certain sports share a training facility with other sports, so their time at the training field is limited if they have to return to the dormitory. "If we can, we'd want to find a location to rest . . . Aah, it's almost as if we're training, therefore we need a place to lie down for a moment, straighten our waists, straighten our legs . . . Our hall is a multipurpose facility; therefore, we share three sports . . . No way, Dr., there are occasions when other sports will sit on the board. There's more to sports than fencing, boccia, and ping-pong. We also collaborate with other sports. We don't dare to change the place since we don't dare to probe. That is what MSN (National Sports Council) provides" (N, boccia).

The suggested improvement in access or road conditions is that there are no poles or trees in the center of the guiding block. Athletes using wheelchairs, particularly motorized ones, hoped that potholes could be fixed. Athletes with visual impairment can benefit from well-planned parking spaces that keep them from colliding with other automobiles. It is vital to provide accessible parking close to the entrance. Buses with specific wheelchair features are also expected to be provided so that athletes do not risk injury or back problems while traveling to competitions on conventional buses.

4. Discussion

The accessibility of sports facilities in Indonesia and Malaysia for training and competition was evaluated. There are five areas addressed in this study: access to training facilities, access inside training facilities, access during competitions, and athletes' expectations of training and competition facilities. The availability of transportation, easily accessible sites and the adaption of facilities to meet the needs of athletes with disabilities are just a few of the factors that might influence an athlete's overall performance [24]. Additional factors such as energy level, availability of information, supervisor certification and low-cost equipment are necessary to sustain and assist in the level of preparation required to participate in the world's most prestigious stage of the competition [25–27]. It is critical to have better knowledge of how the environment supports or limits athletes as they practice and prepare for competition to further increase participation and accomplishment in sports [28]. Figure 2 shows the problems faced by athletes in terms of accessibility.

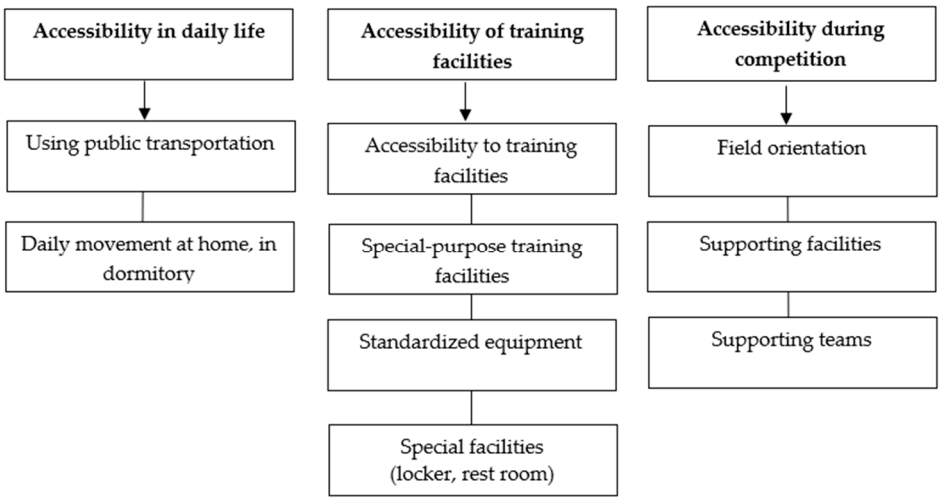

Figure 2. Problems faced by athletes in terms of accessibility.

The primary barrier for athletes with disabilities was access to facilities and modes of transportation [29,30]. Barriers for athletes in rural areas include the unavailability of training partners and a considerable travel distance [31]. Similarly, according to a study conducted by Jaarsma (2014), up to 51% of wheelchair athletes reported having "insufficient

sports facilities throughout their neighborhood", requiring the need for transportation to get to the training field [29].

When it comes to getting to and from the training facility, one of the biggest obstacles that athletes faced was transportation. Even though ride-hailing apps were widely used by athletes in Indonesia and Malaysia, some of the drivers refused to take them on several occasions. Transportation was often cited as a barrier to participation in sports by participants. In addition to a lack of public transportation, athletes with disabilities also faced high expenditures for taxi services to and from sporting venues, as well as difficulties navigating public transportation owing to the use of a wheelchair [26].

A training facility may be defined as a venue where physical activity takes place, as well as the components that go along with it, such as training equipment. With training facilities not being in a centralized location, it makes it difficult for athletes to access all the sports [28]. Additionally, there are no supporting amenities such as air conditioning, fans or lockers. This research corroborates Jaarsma's finding that up to 30% of wheelchair athletes thought their "facilities were not (adequately) modified" [29].

Equipment that is not comfortable and does not fit the athlete's size is one of the things that athletes in both Indonesia and Malaysia have expressed dissatisfaction with. The availability of adequate equipment has a significant influence on an athlete's ability to compete [32]. According to the findings of previous research, technology and equipment may make a significant contribution to Paralympic sports [33].

The input from top para-athletes needs to be include in advancing the sport and athletes' performance [34]. This information is critical when properly fitted equipment is used in conjunction with a thorough plan to achieve the greatest levels of performance [32].

Coaches, according to Mallet and Hanrahan, are crucial in assisting athletes in implementing adaptive motivating techniques that increase performance quality [35,36]. Coaches played an important role in supporting the athletic development of wheelchair rugby competitors [37]. It has been demonstrated that negative coaching tactics, behaviors and interpersonal concerns can cause stress and limit performance in athletes with disabilities.

By examining the safety and wellbeing of each stakeholder, solutions are produced to promote pedestrian mobility equality and wellbeing for visually impaired pedestrians, particularly in urban areas. Person with visual impairment have limited access to both space and time, as well as to objects [38], while access to transportation and technology determines space–time restrictions. By the conclusions of the research, pedestrian dangers have an impact on the quality of life and the efficiency of transportation systems [39–41]. Recommendations on mobility concerns are intended to assist urban planners, engineers, community organizers and other stakeholders.

The limitations of this study are only exploring the experiences of Paralympic athletes regarding their access during training and competition. We did not compare with statements from stakeholders and policymakers. We also do not directly observe the conditions and training facilities available. It is important to perform this to obtain a comprehensive description of the accessibility of Paralympic athletes in training and competing, so further studies need to be conducted in the future.

5. Conclusions

The way disability is understood and positioned informs how accessibility is incorporated in the development of pathways to sporting excellence for athletes with disabilities. Understanding the requirements and challenges of para-athletes and para-sports is needed to achieve safe, equitable and inclusive sports. This study, which focused on Indonesia and Malaysia, found that athletes from both countries experienced similar issues. The availability of the tools and facilities that support the training and performance of athletes with disabilities is important to note. Athletes with disabilities are part of the sporting family and their needs should be considered when making training and competition venues accessible.

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